

WHAT IS CLAIMED IS:

1. A vehicle key-less entry system, comprising:
 - door-handle operation detecting means for detecting whether or not a vehicle door handle is operated and an operational mode by detecting a speed of the door handle, for entering a cipher code;
 - checking means for checking whether the entered cipher code is equal to a prestored cipher code based on the detected operational mode; and
 - locking controlling means for controlling a locking mechanism to unlock a vehicle door when the entered cipher code is equal to the prestored cipher code.
2. The vehicle key-less entry system according to claim 1, wherein the door-handle operation detecting means includes a contact switch for detecting an operation of the door handle.
3. The vehicle key-less entry system according to claim 1, wherein the door-handle operation detecting means includes a non-contact switch for detecting an operation of the door handle.
4. The vehicle key-less entry system according to claim 2, further comprising an escutcheon section provided in the vehicle door, the switch being attached to the escutcheon section.
5. The vehicle key-less entry system according to claim 3, further comprising an escutcheon section provided in the vehicle door, the switch being attached to the escutcheon section.
6. The vehicle key-less entry system according to claim 2, further comprising said escutcheon section having a link arm provided in the vehicle door, the switch being attached to the link arm.
7. The vehicle key-less entry system according to claim 3, further comprising said escutcheon section having a link arm provided in the vehicle door, the switch being attached to the link arm.
8. The vehicle key-less entry system according to claim 1, wherein the

door-handle operation detecting means detects the speed of the door handle based on at least two operational speed patterns.

9. A method of unlocking a vehicle door, comprising the steps of:

detecting whether or not a vehicle door handle is operated and an operational speed when the door handle is detected as operated for entering a cipher code;

checking whether the entered cipher code is equal to a prestored cipher code based on the detected operational speed; and

controlling a locking mechanism to unlock a vehicle door when the entered cipher code is equal to the prestored cipher code.

10. The method of unlocking a vehicle door according to claim 9, further comprising a step of entering an operational speed of the door handle as reference data.

11. The method of unlocking a vehicle door according to claim 10, further comprising the step of determining that the door handle is operated quickly when the door handle is operated at a speed almost equal to or higher than the reference data.

12. The method of unlocking a vehicle door according to claim 10, further comprising the step of determining that the door handle is operated slowly when the door handle is operated at a speed lower than the reference data.